A guide to the intergovernmental and industry organizations involved in the prevention and mitigation of oil pollution in the marine environment
## Contents

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>2</td>
</tr>
<tr>
<td><strong>Sources of oil pollution in the marine environment</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>Prevention: the safe transport of oil by sea</strong></td>
<td>5</td>
</tr>
<tr>
<td>Key responsibilities</td>
<td>5</td>
</tr>
<tr>
<td>International legal and regulatory framework</td>
<td>6</td>
</tr>
<tr>
<td>The voyage</td>
<td>8</td>
</tr>
<tr>
<td><strong>Preparedness and planning</strong></td>
<td>10</td>
</tr>
<tr>
<td>Spirit of cooperation</td>
<td>10</td>
</tr>
<tr>
<td>Contingency planning</td>
<td>10</td>
</tr>
<tr>
<td><strong>Response</strong></td>
<td>12</td>
</tr>
<tr>
<td>Responsibility</td>
<td>12</td>
</tr>
<tr>
<td><strong>Compensation</strong></td>
<td>13</td>
</tr>
<tr>
<td><strong>Prevention: risks from other sources</strong></td>
<td>15</td>
</tr>
<tr>
<td>Oil production offshore</td>
<td>15</td>
</tr>
<tr>
<td>Pipelines</td>
<td>15</td>
</tr>
<tr>
<td><strong>The organizations</strong></td>
<td>17</td>
</tr>
<tr>
<td>International Association of Independent Tanker Owners (INTERTANKO)</td>
<td>18</td>
</tr>
<tr>
<td>International Association of Oil &amp; Gas Producers (OGP)</td>
<td>18</td>
</tr>
<tr>
<td>International Chamber of Shipping (ICS)</td>
<td>19</td>
</tr>
<tr>
<td>International Maritime Organization (IMO)</td>
<td>19</td>
</tr>
<tr>
<td>International Oil Pollution Compensation Funds (IOPCF)</td>
<td>20</td>
</tr>
<tr>
<td>International Petroleum Industry Environmental Conservation Association (IPIECA)</td>
<td>20</td>
</tr>
<tr>
<td>International Tanker Owners Pollution Federation Limited (ITOPF)</td>
<td>21</td>
</tr>
<tr>
<td>Oil Companies International Marine Forum (OCIMF)</td>
<td>21</td>
</tr>
<tr>
<td>United Nations Environment Programme (UNEP)</td>
<td>22</td>
</tr>
<tr>
<td>International Group of Protection and Indemnity Clubs (P&amp;I Clubs)</td>
<td>22</td>
</tr>
<tr>
<td>Major Tier 3 Response Centres and Equipment Stockpiles</td>
<td>23</td>
</tr>
<tr>
<td><strong>Acronyms and abbreviations</strong></td>
<td>24</td>
</tr>
</tbody>
</table>

**Action against oil pollution on CD-ROM**

The CD-ROM contains additional resources which are accessible directly via the links in this PDF file. (The document also contains links to related information on the Internet.)

1
A significant proportion of the world’s oil is produced offshore, and is subsequently transported by pipeline, both onshore and offshore, or by sea in ships. Although over the years the amount of oil produced and transported has greatly increased as the world’s economy has expanded, the amount of oil spilt has decreased. This reduction is primarily due to the concerted efforts of the various stakeholders in the oil supply chain to develop more effective preventative measures.

Significant advances in material and construction technology and stricter operational procedures in the offshore industry and pipeline operations have minimized the risk of spills into the marine environment. The downward trend in the number of shipping-related incidents (see page 3) also reflects better technology and work carried out by the oil and shipping industry with the regulators and legislators to minimize the risk of accidents and environmental damage.

This guide focuses on the transportation of oil by ship and is the result of a collaborative effort by many organizations who have an interest in the prevention and/or mitigation of oil pollution and its effects on the marine environment.

The purpose of the guide is to explain to the outside observer the complex framework of international legislation, conventions and protocols which are associated with marine pollution and the arrangements established by the oil and shipping companies to prevent oil spills. The guide:

- explains the actions taken by the oil and shipping industry, in cooperation with the international community, to reduce the risk of oil entering the marine environment;
- outlines the controls, rules, regulations and procedures that are in place to ensure safe carriage of oil by sea;
- describes the contingency plans, programmes and capability put in place by industry and coastal states around the world to respond in the event of an oil spill; and
Action against oil pollution • Introduction

- explains the international compensation arrangements established to compensate for clean-up costs and to help preserve the livelihood of those affected by pollution.

References for further reading are provided in this document by way of links to additional information on the CD-ROM and also on the Internet.

Figure 1
Trend in major spills of petroleum products from shipping.
For a summary of ITOPF statistics on accidental oil spillages from tankers, combined carriers and barges see: www.itopf.com/stats.html

(Source: ITOPF)
Sources of oil pollution in the marine environment

Oil spills from shipping almost always attract substantial media and public attention, and motivate new legislation. Many assessments have been made of the quantities of oil entering the marine environment, however in every case these studies recognize the relatively small contribution arising from tanker operations. A significant amount of oil spilled into the sea comes from other sources, including seepages from the natural environment, discharges from refining, distribution and retail operations as well as end users of oil products. Waste disposal on land, together with the illegal dumping/discharge of waste oil, represents a substantial source of pollution to the sea from land run-off. Data drawn from *Oil in the Sea III: Inputs, Fates and Effects* (National Research Council, 2003) suggests that, on average, about 8 per cent of petroleum released into the sea each year comes from tanker spills. Extractive activities (for example at offshore drilling rigs and platforms) are a relatively minor source of spills.

Although marine transportation of oil represents the greater risk of spills, for completeness the guide also briefly describes the arrangements in place for the prevention of spills from offshore oil production and pipelines (see page 15).

**Figure 2**

*Average annual releases (1990–99) of petroleum into the sea by source*

Prevention: the safe transport of oil by sea

While governments around the world take the lead in defining what is required in terms of pollution prevention, industry’s role is to take responsibility for delivering the required performance level within these defined requirements, and apply higher standards where requirements fall short of accepted norms. Experience shows that the best environment for pollution prevention comes from good legislation and enforcement coupled with good and responsible industry performance.

The vast majority of companies in the oil transport chain recognize that good environmental performance is good business, and many companies build on existing legislation to create a safety and environmental ‘culture’ in their organizations.

This section looks at:
- the main players and their respective obligations under international law;
- what standards and controls are in place to prevent an accident or failure; and
- how the industry manages this risk to ensure oil is safely transported by sea.

Key responsibilities

- **Ship owner**
The responsibility for maintaining a safe and seaworthy ship lies with the ship owner. This is a legal duty which the ship owner cannot delegate. The ship owner is the person in control of the vessel, and has responsibility for its operation, maintenance and manning.

- **Ship registry**
All ships must be registered in a given country (known as ‘State’). The State where a ship is registered is known as the Flag State. It is the unique responsibility of the Flag State to ensure that the vessel complies with its laws and regulations and all applicable international regulations. Flag States, therefore, are responsible for enforcing applicable laws and regulations on ships registered with them.

- **Classification societies**
In addition to complying with the international regulations, the ship hull and machinery is legally required to be insured. Ships are unable to obtain insurance unless they are built and maintained to a recognized standard. [Classification Societies](#) provide the standards for construction and maintenance of the ship. The International Association of Classification Societies (IACS) is formed of members who comply with the IACS Quality System Certification Scheme (QSCS) and observe the Code of Ethics mandatory for both IACS Member and Associate status. Classification Societies may be used to assist Flag States and certify that the ship complies with applicable regulations.

- **Port States**
States that receive foreign ships in their ports, sometimes referred to as Port States, whilst not diluting the responsibility of the Flag State, also have a role in enforcement of national and international regulations. A number of Port States...
have cooperated under regional agreements known as Memoranda of Understanding (MoU) to carry out inspections of vessels which visit their ports, to ensure they comply with international regulations and to identify substandard ships. These Port States have the power to detain ships until such time as they comply with the relevant national and international regulations.

The oil and shipping industry

Whilst it is easy to understand the responsibilities of the ship owner as the transporter of the oil, it is important to emphasize the contribution of the cargo owners as charterers of the ship. They have a direct interest in making sure that the cargo reaches its final destination safely by ensuring that the ship is operated properly. To do this, oil companies are selective over the ships they use and have a system of vetting ships (see pages 8–9).

The oil and shipping industries have contributed directly to ship integrity and operational improvements not just in compliance but also in leading the way in innovative techniques and systems which complement the statutory requirements of national and international regulatory bodies. They have formed their own organizations to advise and educate on technical matters, with particular emphasis on safe operation and protection of the environment.

The main international industry organizations are included in this document. They are the:

- International Association of Independent Tanker Owners (INTERTANKO);
- International Chamber of Shipping (ICS);
- International Petroleum Industry Environmental Conservation Association (IPIECA);
- International Tanker Owners Pollution Federation (ITOPF); and
- Oil Companies International Marine Forum (OCIMF).

An example of such guidance is the International Safety Guide for Oil Tankers and Terminals (ISGOTT). The guide is published jointly by the International Chamber of Shipping, the Oil Companies International Marine Forum and the International Association of Ports and Harbors. It is internationally recognized as the leading technical publication giving guidance on the safe operation of oil tankers and terminals.

All of the above industry organizations work closely with the International Maritime Organization (see below).

International legal and regulatory framework

The International Maritime Organization (IMO), a specialized agency of the United Nations, is the international statutory body responsible for measures to improve the safety and security of international shipping and to prevent marine pollution from ships through International Conventions, advisory bodies and education.

The International Conventions are the foundation for most international and national legislation regarding the construction, operation and manning of ships. When the conventions are adopted or ratified by national governments they are embedded into national legislation, usually through a Maritime Act or similar legislative tool. It is the responsibility of national governments worldwide to enforce the requirements of the Acts on ships sailing under their national flag of registry, or foreign ships operating within their jurisdictional waters. This enforcement is carried out by both the Flag State Control and the Port State Control.

IMO has a number of international legal instruments and conventions which specifically

IMO headquarters, London, UK
Examples of maritime conventions

**MARPOL 73/78**
International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol 1978

The MARPOL Convention is the main international Convention covering prevention of pollution of the marine environment by ships. The Convention includes regulations aimed at preventing and minimizing pollution from ships—both accidental pollution and that from routine operations.

**SOLAS**
International Convention for the Safety of Life at Sea, 1974

The main objective of the SOLAS Convention is to specify minimum standards for the construction, equipment and operation of ships, compatible with their safety. Flag States are responsible for ensuring that ships under their flag comply with its requirements, and a number of certificates are prescribed in the Convention as proof that this has been done. This Convention makes mandatory the International Safety Management code (ISM) and the International Ship & Port Facility Security (ISPS) code.

**STCW**
International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978

The 1978 STCW Convention was the first to establish basic requirements on training, certification and watchkeeping for seafarers on an international level. The Convention prescribes minimum standards relating to training, certification and watchkeeping for seafarers which countries are obliged to meet or exceed.

**COLREG**
Convention on the International Regulations for Preventing Collisions at Sea, 1972

This Convention outlines the requirements on ships to provide clear navigation signalling equipment and to abide by international rules of navigation.

**Loadline Convention**
International Convention on Load Lines, 1966

It has long been recognized that limitations on the draught to which a ship may be loaded make a significant contribution to her safety. These limits are given in the form of freeboards, which constitute, besides external weathertight and watertight integrity, the main objective of the Convention.

**OPRC**
International Convention on Oil Pollution Preparedness, Response and Cooperation 1990

Parties to the Convention are required to establish measures for dealing with pollution incidents, either nationally or in cooperation with other countries and are required to provide assistance to others in the event of a pollution emergency. Provision is made for the reimbursement of any assistance provided. The Convention provides for IMO to play an important coordinating role.

**Intervention Convention**
International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969

The Convention affirms the right of a coastal State to take such measures on the high seas as may be necessary to prevent, mitigate or eliminate danger to its coastline or related interests from pollution by oil or the threat thereof, following upon a maritime casualty. The 1973 Protocol extended the Convention to cover substances other than oil.

**Salvage Convention**
The International Convention on Salvage, 1989

The Convention makes provision for an enhanced salvage award taking into account the skill and efforts of the salvors in preventing or minimizing damage to the environment. It replaced a convention on the law of salvage adopted in Brussels in 1910 which incorporated the ‘no cure, no pay’ principle under which a salvor is only rewarded for services if the operation is successful.

**CLC**
International Conventions on Civil Liability for Oil Pollution Damage, 1969 & 1992

The Civil Liability Conventions were adopted to ensure that adequate compensation is available to persons who suffer oil pollution damage resulting from maritime casualties involving oil-carrying ships. The Conventions place the liability for such damage on the owner of the ship from which the polluting oil escaped or was discharged.

**FUND Conventions**

The liability of the ship owner under CLC is limited according to the size of the ship. The purpose of the Fund Conventions is to provide ‘top-up’ compensation for pollution damage when the limited liability of the ship owner is inadequate. The 1971 Fund Convention was superseded by the 1992 Fund Convention, which came into force on 30 May 1996, and the Supplementary Fund Protocol which took effect on 3 March 2005. The Fund Conventions are administered by an intergovernmental organization, the IOPC funds, and financed by the oil industry.
address the issue of prevention of pollution of the marine environment stemming from ships and port facilities.

The voyage

Figure 3 shows the relationship between the main constituents and also the processes involved in ensuring safe carriage and transfer during the oil transport chain.

The voyage is a culmination of a complex process of matching a suitable ship with a cargo. The voyage will take place within a given regulatory framework, determined in part by the loading and discharge port but also by the Flag State of the ship. The ship charterer or the cargo owner may impose additional rules to satisfy their own policies.

- **Ship selection and chartering**
  When a charterer requires a ship to move one of its cargoes across the sea it will contact a number of ship owners (usually through a ship broker) and ask the ship owners to nominate appropriate ships. It is the responsibility of the ship owner to nominate a safe and seaworthy ship that complies with all relevant international and national regulations. It should be noted that the ship owner retains full responsibility and control over the management, operation and maintenance of the ship. The charterer has no control over such activities.

In addition, reputable oil companies that charter ships operate a ship vetting process to produce a quality/risk assessment for each individual ship. This quality/risk assessment will assist the company in deciding whether or not to charter a particular ship.

- **Ship vetting**
  Ship vetting (also known as ship screening) is a complex quality and risk assessment process taking into consideration many factors affecting the tanker management and operational standards of the ship in question. At a minimum,
the ship has to comply with applicable legislation and regulatory standards and, in some cases, the oil and shipping industry’s guidance and criteria.

All vetting systems employ different methods for determining the acceptability of a ship for charter and some factors will influence charterers in different ways. However, some of the key factors normally considered include:

- ship owner/operator performance assessment and rating;
- incidents and casualty history;
- ship inspections and condition assessment data;
- Port State inspection performance and history;
- oil terminal performance and feedback.

Usually each vessel will have a physical inspection by an accredited surveyor and other information is gathered from various sources and databases on the historical performance of the vessel and operator. When inspections are carried out by accredited inspectors, copies of their reports are filed with industry databases as appropriate. This information collectively is used to determine the ship’s suitability for the charter. Databases have been established such as that used by the OCIMF's global Ship Inspection Report (SIRE) Programme, the European Barge Inspection Scheme (EBIS), the Chemical Distribution Institute (CDI) and the international EQUASIS ship information system, to facilitate access to these reports and data. Part of the vetting programme is to undertake a due diligence check that the ship complies with legislative and regulatory requirements.

Before the business of transporting the cargo can commence, the vessel and the charterer need to complete the chartering agreement (called the Charter Party). As the ship requires loading, it will proceed to the loading port where it must comply with a number of rules, regulations and industry practices. It may be subjected to a Port State Control inspection which will verify whether the vessel is in compliance with the various International Conventions and national legislation described previously. When the ship reaches the off-loading port it could be subjected to the same Port State Control inspections as at the loading port and may have to comply with similar oil spill response arrangements as that experienced at the loading port, depending on the status of conventions in that country.
While the priority for all marine operations is the prevention of oil spills, it is recognized that marine spills are a risk for which industry and coastal state governments must plan.

**Spirit of cooperation**
A cooperative approach by all parties concerned is essential to ensure an effective response. When developing plans, companies should seek the cooperation of those who share the risk and those who will participate in the response, by integrating their plans with those of national authorities, industry partners and response resources.

In 1990 the IMO adopted a pivotal Convention which promotes the spirit of bilateral cooperation between countries and between governments and industry. The OPRC 1990 Convention has now been ratified by 84 countries representing about 64 per cent of world tonnage.

A significant amount of work has been, and continues to be, carried out by the oil industry in conjunction with the IMO to encourage the spirit of cooperation between national governments and the oil industry, called for in the OPRC 90 Convention. This Global Initiative assists developing countries in preparing for major oil spills by direct assistance, and runs workshops and conferences for education purposes. The cooperation between IMO and the industry has resulted in internationally accepted guidelines on a range of oil spill topics being jointly published by the IMO and IPIECA.

Over the years IMO and UNEP have promoted regional agreements, aimed primarily at developing countries. Agreements such as REMPEITC for the wider Caribbean, REMPEC for the Mediterranean, MEMAC for the Persian Gulf and OSRAP for East Asian Seas are just a few.

Other regional organizations have promoted similar agreements between coastal states, for example: the Bonn Agreement, to which the coastal states of the North Sea and the European Community are contracting parties; the Baltic Marine Environment Protection Commission, also known as HELCOM, which administers the Helsinki Convention covering the Baltic States; and there are many others.

The main objective of these agreements is to encourage cooperation on response arrangements and sharing of expertise and resources between countries.

**Contingency planning**
It is widely accepted that contingency planning leads to more effective and efficient response to an incident. A good plan will outline appropriate

Response equipment stored in a warehouse and ready for immediate transportation
response strategies with the aim of reducing ecological, economic and social damage and subsequent compensation claims. The plan will also identify appropriate resources and expertise. Click these links for more information on contingency planning and exercise planning.

The size, location and timing of an oil spill are unpredictable, so it is important that any response arrangements are flexible enough to cope with this uncertainty. In the contingency planning process a risk assessment must be carried out. Oil spill risks and the responses they require are usually classified according to the size of a spill, its characteristics (types of oil react differently when spilled on water) and its proximity to a response resource. In order to plan for the range of potential spill sizes, from small operational spills to worst-case scenarios, industry and governments frequently follow the concept of a ‘tiered response’. The concept allows for the correct level of equipment and resources to be available, within a minimum response time appropriate to the risk and for the efficient escalation of response level by calling upon supplementary resources.

Conceptually there are three tiers of response:

- Tier 1 arrangements are established at individual ports and oil handling facilities, and are designed to deal effectively with small operational spills.
- Tier 2 arrangements provide for the pooling of government or privately owned resources at a local level or from a wider geographical area.
- Tier 3 arrangements provide for a combined national or international response to a major oil spill that cannot be dealt with effectively under the Tier 2 arrangements.

Click here for more information on the Tiered Response concept and the international Tier 3 centres.

**Figure 4** The ‘tiered response’ concept enables effective escalation of a response to changing circumstances.
Effective response to a major marine oil spill relies on good preparedness and adequate resources and expertise.

The size of the spill, its location and the characteristics of the oil will dictate the level of response. Most facilities where oil is produced, stored or transported will have Tier One arrangements on site, which can be rapidly deployed. In the event the spill exceeds the response capability of the facility, it may rely on a Tier Two arrangement which draws equipment and expertise from other local facilities or dedicated equipment stockpiles.

If the spill exceeds this local response capability, the response invariably will be government led and there may be a requirement to mobilize national or international resources through the regional agreements mentioned previously, or through industry arrangements with international response organizations. This assistance is not just in the form of equipment, but also specialist expertise and manpower to manage the diverse issues and operations required by an oil spill clean-up operation.

The oil industry recognized this global requirement by governments and over the years has established a number of strategically located oil spill response centres to service regional, and in one case global, requirements. These centres, funded by oil companies, are generally known as International Tier 3 Centres and are an example of the cooperation between the industry and public bodies which is called for under the OPRC 1990 Convention.

In the event of a very large spill, considerable amounts of equipment and expertise may need to be mobilized on an international scale and it is vital that the necessary logistical support is available locally, including suitable unloading equipment, aircraft, transport, cranes, vessels and recovered oil storage facilities. It is also important to secure the full cooperation of the relevant government authorities in facilitating the import and clearance of personnel and equipment, and in making available internal transport facilities and appropriate personnel of their own.

Responsibility

In the majority of countries the response to a major oil spill is covered by a regulatory framework which may incorporate international conventions such as OPRC 1990, and regional agreements such as the Bonn Agreement. These conventions and agreements are embedded into national legislation and a government department will be identified which holds responsibility for implementation and enforcement. Except where small operational spills occur, it is normally the government or its delegate which leads the response effort, supported by industry. However in some states, most notably the USA, it is the polluter who has the responsibility for leading the response.
The oil and shipping companies believe that those who have to conduct clean-up operations or suffer damage as a result of an oil spill from a tanker need to be assured that they will receive prompt and adequate compensation. There is a complex interlocking scheme of liability insurance (obtained by ship owners through mutual insurers called Protection and Indemnity (P&I) Clubs) and levies (financed by oil companies) administered through various national and intergovernmental regimes and administrations. Insurance by ship owners against oil pollution is compulsory.

The Torrey Canyon incident in 1967 provided a major stimulus for industry to develop two voluntary agreements (Tovalop and CRISTAL) dealing with compensation for oil pollution. Two international Conventions (the 1969 Civil Liability Convention and the 1971 Fund Convention, which are funded by the shipping and oil industries respectively) were also negotiated. Through these Conventions compensation was made available to those who incurred clean-up costs or suffered pollution damage as a result of a spill of persistent oil from a tanker. The original Conventions were amended in 1992 and in 1997 when the voluntary agreements lapsed. In October 2000, in the wake of substantial claims resulting from the Erika accident off France, the limits of both the 1992 Civil Liability and Fund Conventions were increased substantially. A further important development occurred in May.

**Figure 5**
The three levels of compensation established by the international Conventions: the owner of the tanker that causes the spill is legally liable for the payment of compensation under the first level; oil receivers in Fund Member States contribute to the second and third level once the tanker owner’s applicable limit of liability has been exceeded.
2003 following the *Prestige* incident, when a Protocol was adopted at the IMO creating The International Oil Pollution Compensation Supplementary Fund or ‘Supplementary Fund’. The amount of compensation potentially available in states which are members of the Supplementary Fund now totals more than one billion US dollars. As with the 1992 Fund, the Supplementary Fund is financed by the oil industry.

The International Oil Pollution Compensation Funds (IOPCF) 1971, 1992 and the Supplementary Fund are administered by a joint Secretariat based in London (see www.iopcfund.org).

A proposal has also been made to raise voluntarily the minimum limit of shipowner liability for small tankers in CLC 92 under an agreement known as STOPIA (Small Tanker Oil Pollution Indemnification Agreement.)

Under the compensation regimes the scope of damage and activities covered includes preventive measures to reduce effects, physical damage caused by the oil, damage through response activities, spilled oil recovery and disposal, cost of the use of response materials, cleaning of response equipment, economic loss, and environmental restoration and post-spill studies.

The USA has not ratified the international compensation Conventions and has its own domestic legislation for compensating those affected by oil spills within their territory. In 1990, following the *Exxon Valdez* incident, the USA enacted its own Oil Pollution Act (OPA 90) which includes provisions on liability and compensation. The potential compensation available under **OPA 90** is similar to that of the international compensation regime. A detailed description of the international compensation regime is included in the [IPIECA/ITOPF briefing paper](http://www.iopcfund.org) entitled *Oil Spill Compensation: a Guide to the International Conventions on Liability and Compensation for Oil Pollution Damage.*
Prevention: risks from other sources

Oil production offshore
The risk of a major oil spill from an offshore platform, although not impossible, is very low. Oil spills from offshore exploration and production accounted for, on average, less than 4 per cent of the total oil finding its way into the sea each year (see Figure 2).

Advances in technology and process are the most significant factors in ensuring the risk is kept to a minimum. However there is a risk of an uncontrolled ‘blow out’ which would release large quantities of oil. With the modern emergency shut-down systems employed on modern day platforms, risk of such occurrence is dramatically reduced.

Because the majority of production platforms are long-term and static structures, responding to an oil spill from an offshore platform may be easier than responding to a spill from a ship. The fate and effect of the oil is relatively predictable due to prior knowledge of oil characteristics, local currents and seasonal wind direction. As a consequence effective contingency arrangements can be put in place to respond rapidly to any spill.

In general oil production offshore is regulated through national legislation. However, there are regions of the world where offshore operations are controlled by the operators themselves.

Where governments regulate, they set the standards for operation and planning for emergencies including oil spill response. Contingency plans have to be prepared by the operator of the offshore facility and endorsed by the regulatory authority before the facility can begin operation. Where governments do not regulate, the operator of the drilling rig or production platform will use their own in-house standard operating procedures to ensure effective contingency arrangements are in place.

Pipelines
There are complex and extensive systems of pipelines across continents, states and seas carrying oil, gas, condensates, and their mixtures. These pipelines are among the main factors of environmental risk during offshore oil developments, along with tanker transportation and drilling operations.
In most cases national governments will regulate the routing and the design specifications of the pipelines taking into account proximity and density of population and environmental impact assessments.

The causes of pipeline damage and leakage can differ greatly. They range from material defects and pipe corrosion to ground erosion, tectonic movements on the sea bottom, and contact with ship anchors and bottom trawls. Modern technologies of pipeline construction, burying, routing and marking of pipelines have significantly reduced the number of major spills, although on land substantial damage may still be caused by spills due to thefts or sabotage.

Overland pipeline spills tend to be localized although sometimes can be serious if they spread through groundwater. Offshore pipelines and those which cross rivers may be a source of more widespread pollution as the spilled oil will be influenced by water temperature and movement.

Similarly to offshore platforms, pipelines across land are permanent and static. The potential for leaks at different points along the pipeline is evaluated and appropriate mitigating measures put in place. This can involve sophisticated leak detection systems relying on oil flow and pressure. Most major pipeline routes over land are regularly monitored from the air.

Action against oil pollution • Prevention: risks from other sources
The Organizations

The key intergovernmental and industry organizations involved in the action against oil pollution are shown below and their details featured on the following pages. Additional information can be found on each organization’s website and on this CD-ROM.

- International Association of Independent Tanker Owners (INTERTANKO)
- International Association of Oil & Gas Producers (OGP)
- International Chamber of Shipping (ICS)
- International Maritime Organization (IMO)
- International Oil Pollution Compensation Funds (IOPCF)
- International Petroleum Industry Environmental Conservation Association (IPIECA)
- International Tanker Owners Pollution Federation Limited (ITOPF)
- Oil Companies International Marine Forum (OCIMF)
- United Nations Environment Programme (UNEP)
- International Group of Protection and Indemnity Clubs (P&I Clubs)
- Major Tier 3 Centres and Equipment Stockpiles
### International Association of Independent Tanker Owners (INTERTANKO)

St Clare House, 30–33 Minories
London EC3N 1DD, United Kingdom
Tel: +44 (0)20 7977 7010
Fax: +44 (0)20 7977 7011
Website: [www.intertanko.com](http://www.intertanko.com)
See also: [www.marisec.org/shippingfacts](http://www.marisec.org/shippingfacts)

INTERTANKO (the International Association of Independent Tanker Owners) has been the voice of independent tanker owners since 1970, ensuring that the oil that keeps the world turning is shipped safely, responsibly and competitively.

Independent owners operate some 80 per cent of the world's tanker fleet and the vast majority are INTERTANKO members. As of May 2003, the organization has 242 members, whose combined fleet comprises more than 2,160 tankers totalling 160 million dwt, which is 70 per cent of the world's independent tanker fleet above 10,000 dwt. INTERTANKO is a forum where the industry meets, policies are discussed and statements are created. It is a valuable source of first-hand information, opinions and guidance. INTERTANKO has a vision of a professional, efficient and respected industry, that is dedicated to achieving safe transport, cleaner seas and free competition.

The organization conducts much of its business through a number of technical committees and it is the Safety, Technical and Environmental Committee (ISTEC) which, amongst others, addresses the issues of pollution of the marine environment.

The Committee's aims include:
- developing an understanding of environmental issues;
- participating in an informed manner, so that the issues directly affecting tanker operations are better represented by INTERTANKO for the benefit of its members;
- developing environmental policies for INTERTANKO to follow up at IMO and elsewhere and be proactive in approach; and
- establishing effective dialogue with environmental groups.

Read the [INTERTANKO Annual Report 2004](http://www.intertanko.com).

### International Association of Oil and Gas Producers (OGP)

5th Floor, 209–215 Blackfriars Road
London SE1 8NL, United Kingdom
Tel: +44 (0)20 7633 2388
Fax: +44 (0)20 7633 2389
Website: [www.ogp.org.uk](http://www.ogp.org.uk)

The International Association of Oil & Gas producers (OGP) encompasses most of the world's leading publicly-traded, private and state-owned oil and gas companies, oil and gas associations and major upstream service companies. OGP members produce more than half the world's oil and about one third of its gas.

The Association was formed in 1974 to develop effective communications between the upstream industry and an increasing complex network of international regulators. OGP represents the industry in such bodies as the IMO, Commission for sustainable development, and the World Bank. It is also accredited to a number of regional organizations such as OSPAR, the Helsinki Commission, the Barcelona Convention and the Arctic Council.

Part of its mission and objectives is to help its members to achieve continuous improvement in safety, health and environmental performance, and to develop and disseminate best practices in safety, health and environmental performance in the engineering and operation of upstream ventures.
The International Chamber of Shipping (ICS) is the international trade association for merchant ship operators, representing the collective views of the international industry from different nations, sectors and trades. ICS membership comprises national ship owners’ associations representing the majority of the world’s merchant fleet.

The ICS Statement of Purpose with regard to ship safety and environmental protection is to:

- Encourage high standards of operation and the provision of high quality and efficient shipping services.
- Strive for a regulatory environment which supports safe shipping operations, protection of the environment and adherence to internationally adopted standards and procedures.
- Promote properly considered international regulation of shipping and oppose unilateral and regional action by governments.
- Press for recognition of the commercial realities of shipping and the need for quality to be rewarded by a proper commercial return.
- Remain committed to the promotion of industry guidance on best operating practices.
- Cooperate with other organizations, both intergovernmental and non-governmental, in the pursuit of these objectives.
- Anticipate whenever possible and respond whenever appropriate to policies and actions which conflict with the above.

ICS has consultative status with a number of intergovernmental bodies which have a bearing on shipping. Its close ties with IMO stretch back to IMO’s inception in 1958.

The International Maritime Organization (IMO) is a specialized agency of the United Nations with a global mandate to regulate maritime safety and security and the protection of the marine environment from pollution caused by shipping. The Organization has a number of purposes which include:

- providing the mechanism for cooperation among governments in the field of regulation and practices relating to technical matters affecting shipping engaged in international trade; and
- encouraging and facilitating the general adoption of the highest practicable standards in matters concerning maritime safety, security, efficient navigation, and the prevention and control of marine pollution from ships.

With more than 160 member States, the IMO considers and prepares international regulations and standards dealing with the safety and security of shipping and protection of the marine environment. These take the form of global conventions and international instruments which the Organization undertakes measures to implement.

One of the most significant International Conventions with regard to oil spill response is OPRC 90. Under the OPRC 90 Convention, bilateral cooperation between countries and responders is encouraged and the Organization assists in the establishment, operation and maintenance of global, regional, subregional and national arrangements to respond to oil spills.

The IMO works in close cooperation with other UN agencies and the shipping and oil industries.

Details of the principal conventions and instruments adopted by the IMO on prevention and control of oil pollution may be obtained from: www.imo.org
### International Oil Pollution Compensation Funds (IOPCF)

Portland House, Stag Place  
London SW1E 5PN, United Kingdom  
Tel: +44 (0)20 7592 7100  
Fax: +44 (0)20 7592 7111  
Website: [www.iopcfund.org](http://www.iopcfund.org)

The International Oil Pollution Compensation Funds (IOPCF) are intergovernmental organizations that provide compensation for oil pollution damage. Under their regime the owner of a tanker is liable to pay compensation up to a certain limit for oil pollution damage following an escape of persistent oil from his ship. If that amount does not cover all the admissible claims, further compensation is available from the IOPC Fund 1992 if the damage occurs in a State which is a Member of that Fund.

A new Fund, the International Oil Pollution Compensation Supplementary Fund, was established on 3 March 2005. The aim of this Fund is to supplement the compensation available under the 1992 Civil Liability and Fund Conventions with an additional third tier of compensation. Membership of the Supplementary Fund is optional and any State which is a Member of the 1992 Fund may join. The Supplementary Fund will only pay compensation for pollution damage in Member States of that Fund for incidents which occur after 3 March 2005.

The IOPCF, which have a joint Secretariat based in London, are financed by levies on certain types of oil carried by sea. The levies are paid by entities which receive oil after sea transport, and normally not by States.

Anyone who has suffered pollution damage in a Member State may make a claim against the IOPCF for compensation. Information on the types of claims which are admissible can be found in the Claims Manual on the Funds’ website.

### International Petroleum Industry Environmental Conservation Association (IPIECA)

5th Floor, 209–215 Blackfriars Road  
London SE1 8NL, United Kingdom  
Tel: +44 (0)20 7633 2388  
Fax: +44 (0)20 7633 2389  
Website: [www.ipieca.org](http://www.ipieca.org)

IPIECA was established in 1974. It is a voluntary non-profit organization whose membership includes both petroleum companies and associations at the national, regional or international levels.

Separate working groups within IPIECA address global environmental and social issues related to the petroleum industry. Its Oil Spill Working Group has been actively working with the IMO and UNEP since 1987 to improve countries’ capacity to manage major oil spills. The group has produced a number of guides on the effects of oil spills in varying habitats, on contingency planning and on managing the issues facing responders during and after an oil spill.

IPIECA holds formal consultative United Nations status which allows it access as a non-governmental organization (NGO) to relevant UN negotiations. The Association represents the views of its members in public forums and provides an interface between the petroleum industry and the United Nations agencies.

IPIECA’s mission is to develop and promote scientifically sound, cost-effective, practical, socially and economically-acceptable solutions to global environmental and social issues pertaining to the petroleum industry. In pursuing this mission, IPIECA works in cooperation with industry, government, regulatory bodies, international agencies, academia and non-governmental organizations.

A number of IPIECA association members also address oil spill prevention and response. [Click here](http://www.ipieca.org) for a list of association members.
The International Tanker Owners Pollution Federation (ITOPF) is a non-profit making organization funded by the world’s ship owners. Founded in 1968 in the wake of the Torrey Canyon incident, ITOPF has attended more than 500 spills in some 90 countries. Its priority service is responding to ship-source spills of oil and chemicals in the marine environment to give advice on effective clean-up techniques and the mitigation of pollution damage. This service is normally undertaken on behalf of its Tanker Owner Members or Associates (non-tanker owners) and their oil pollution insurers (usually one of the P&I Clubs). ITOPF also attends spills at the request of governments or international agencies such as the International Oil Pollution Compensation Funds (IOPCF).

As an adjunct to its response activities, ITOPF is involved in assessing the impact of spills on economic resources and the environment, and advising on the technical merits of claims for compensation. It also undertakes contingency planning and training assignments. In addition, it is a source of comprehensive information on marine oil pollution through its library, a wide range of technical publications, tanker spills database and website.

ITOPF is based in London with 25 staff members, half of whom are technical advisers available to respond to spills. Since 1980, ITOPF has had observer status with IMO and the IOPCF.

The membership of the Oil Companies International Marine Forum (OCIMF) comprises 53 companies worldwide. Its mission is to be the foremost authority on the safe and environmentally responsible operation of oil tankers and terminals, promoting continuous improvements in standards of design and operation.

OCIMF was formed initially as the oil industry’s response to increasing public awareness of marine pollution, particularly by oil, after the Torrey Canyon incident. Governments had reacted to this incident by debating the development of international conventions and national legislation, and the oil industry sought to play its part by making its professional expertise available and its views known to governmental and intergovernmental bodies. OCIMF was granted consultative status in 1971 at the International Maritime Organization (IMO), and is organized to coordinate oil industry views at IMO meetings, to review technical proposals circulated by IMO and to advise its membership on international and regional legislative activities as they develop. OCIMF also has consultative status with the UN Economic and Social Council, the International Oil Pollution Compensation Fund (IOPCF) and with the International Organisation for Standardisation (ISO).

As well as participating actively in the work of IMO and the IOPCF, OCIMF presents its members’ views before regional and individual national governmental authorities and maintains a close liaison with other industry bodies and associations. An important contribution to the overall safety of the industry is the role that OCIMF plays in producing technical and operational guidelines, either by itself or in cooperation with other industry associations as well as its development and management of the Ship Inspection and Reporting (SIRE) programme. A full-time Director is in charge of a small permanent Secretariat located in London. This Secretariat comprises full-time employees and technical staff seconded from member companies.
UNEP, established in 1972, is the voice for the environment within the United Nations system. UNEP acts as a catalyst, advocate, educator and facilitator to promote the wise use and sustainable development of the global environment. To accomplish this, UNEP works with a wide range of partners, including United Nations entities, international organizations, national governments, non-governmental organizations, the private sector and civil society.

UNEP's work encompasses:
● assessing global, regional and national environmental conditions and trends;
● developing international and national environmental instruments;
● strengthening institutions for the wise management of the environment;
● facilitating the transfer of knowledge and technology for sustainable development; and
● encouraging new partnerships and mind-sets within civil society and the private sector.

To ensure its global effectiveness UNEP supports six regional offices, plus a growing network of centres of excellence such as the Global Resource Information Database (GRID) centres and the UNEP World Conservation Monitoring Centre (UNEP-WCMC). UNEP also has major offices in Geneva and Paris, where its Division of Technology, Industry and Economics is situated.

UNEP and the IMO have jointly established regional agreements in various regions across the world to foster cooperation between countries in managing major oil spills.

Protection and Indemnity Clubs (P&I Clubs)

International Group of Protection and Indemnity Clubs (P&I Clubs)

Peek House, 20 Eastcheap
London EC3M 1EB, United Kingdom
Tel: +44 (0)20 7929 3544
Fax: +44 (0)20 7621 0675
Email: secretariat@internationalgroup.org.uk

Protection and Indemnity Clubs are mutual insurance associations for ship owners. Their function is to cover their members against third-party liability which they may incur in the course of their operations and which would not be covered by ordinary hull and cargo insurance. The Clubs cover almost all the world’s ocean-going tanker fleet. Insurance is provided for a wide range of liabilities including liability for oil pollution.

Links to P&I Clubs:
● American Steamship Owners Mutual Protection and Indemnity Association Inc: www.american-club.com
● Assuranceforeningen Skuld (Skuld P&I Club): www.Skuld.com
● Britannia Steamship Insurance Association Ltd: www.britanniapandi.com
● Gard AS (Gard P&I Club): www.gard.no
● Japan P&I Club: www.piclub.or.jp
● London Steamship Mutual: www.lsso.com
● North of England P&I Association: www.nepia.com
● Shipowners Protection Ltd: www.shipownersclub.com
● Standard P&I Club: www.standard-club.com
● Steamship Mutual Underwriting: www.simsl.com
● Swedish P&I Club: www.swedishclub.com
● UK P&I Club: www.ukpandi.com
● West of England P&I Club: www.westpandi.com
The international Tier 3 Response Centres are oil industry owned, not-for-profit organizations that provide a focal point for response to major incidents. They are an integral part of the tiered response structure inherent in the OPRC convention and reflect industries’ commitment to effective global oil spill response.

The Centres all have expertise available 24 hours a day to provide assistance in the event of an incident, and have substantive amounts of specialist equipment. The Centres support the oil industry and others in preparing for spills through the provision of training, contingency planning, auditing of resources and through the exercising of the plans.

The majority of the world’s most responsible oil companies subscribe to, and take an active part in, the management of the Centres.

Major Tier 3 Response Centres and Equipment Stockpiles

Oil Spill Response Ltd • East Asia Response Pte Limited • Marine Spill Response Corporation • Clean Caribbean & Americas • Australian Marine Oil Spill Centre • Petroleum Association of Japan

The Organizations

- Marine Spill Response Corporation (MSRC)
  220 Spring Street, Suite 500
  Herndon VA20170 USA
  Tel: +1 703 326 5600
  Fax: +1 703 326 5660
  Website: www.msrc.org

- Clean Caribbean & Americas (CCA)
  2381 Stirling Road, Fort Lauderdale
  Florida 33312 USA
  Tel: +1 954 983 9880
  Fax: +1 954 9873001
  Website: www.cleancaribbean.org

- Australian Marine Oil Spill Centre (AMOSC)
  PO Box 1497, Geelong
  Victoria 3220, Australia
  Tel: +61 (0)3 52 72 1555
  Fax: +61 (0)3 52 72 1839
  Website: www.aip.com.au/amosc

- Petroleum Association of Japan (PAJ)
  Keidanren Building, 9-4 1-Chome Otemachi
  Chiyoda-ku, Tokyo 100-0004, Japan
  Tel: +81 3 3279 3819
  Fax: +81 3 3242 5688
  Website: www.pcs.gr.jp

OSRL

Oil Spill Response Ltd (OSRL)
1 Great Cumberland Place
London, W1H 7AL, United Kingdom
Tel: +44 (0)20 7724 0102
Fax: +44 (0)20 7724 0103
Website: www.oilspillresponse.com
Click for information on the OSRL/EARL Global Alliance

EARL

East Asia Response Pte Limited (EARL)
2 Jalan Samulun, Singapore 629120
Tel: +65 6 266 1566
Fax: +65 6 266 2312
Website: www.earl.com.sg
Click for information on the OSRL/EARL Global Alliance
**Acronyms and abbreviations used in this document**

**AMOSC**  Australian Marine Oil Spill Centre  
**CCA**  Clean Caribbean & Americas  
**CDI**  Chemical Distribution Institute  
**CLC**  International Conventions on Civil Liability for Oil Pollution Damage, 1969 & 1992  
**CRISTAL**  A Supplemental to Tanker Liability for Oil Pollution  
**COLREG**  Convention on the International Regulations for Preventing Collisions at Sea, 1972  
**EARL**  East Asia Response Pte Limited  
**EBIS**  European Barge Inspection Scheme  
**EQUASIS**  European Quality Shipping Information System  
**GESAMP**  UNEP/IMO Joint Group of Experts on the Scientific Aspects of Marine Pollution Working Group  
**GRID**  UNEP Global Resource Information Database  
**HELCOM**  Baltic Marine Environment Protection Commission  
**IACS**  International Association of Classification Societies  
**ICS**  International Chamber of Shipping  
**IMO**  International Maritime Organization  
**INTERTANKO**  International Association of Independent Tanker Owners  
**IOPCF**  International Oil Pollution Compensation Funds  
**IPIECA**  International Petroleum Industry Environmental Conservation Association  
**ISGOTT**  International Safety Guide for Oil Tankers and Terminals  
**ISM**  International Safety Management  
**ISO**  International Organisation for Standardisation  
**ISTEC**  Safety, Technical and Environmental Committee (a technical committee of INTERTANKO which, amongst others, addresses the issues of pollution of the marine environment)  
**ITOPF**  International Tanker Owners Pollution Federation Limited  
**MARPOL 73/78**  International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978  
**MEMAC**  Marine Emergency Mutual Aid Centre for the Persian Gulf  
**MSRC**  Marine Spill Response Corporation  
**NGO**  Non-governmental organization  
**OCIMF**  Oil Companies International Marine Forum  
**OGP**  International Association of Oil & Gas Producers  
**OPA 90**  US Oil Pollution Act, 1990  
**OPRC 90**  International Convention on Oil Pollution Preparedness, Response and Cooperation 1990  
**OSRAP**  Oil Spill Response Action Plan for East Asian Seas  
**OSRL**  Oil Spill Response Limited  
**P&I Clubs**  Protection and Indemnity Clubs  
**Paris MOU**  Paris Memorandum of Understanding on Port State Control  
**QSCS**  IACS Quality System Certification Scheme  
**REMPEC**  Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea  
**REMPEITC**  Regional Marine Pollution Emergency, Information and Training Center for the wider Caribbean  
**SIRE**  OCIMF’s Ship Inspection Report Programme  
**SOLAS**  International Convention for the Safety of Life at Sea, 1974  
**STOPA**  Small Tanker Oil Pollution Indemnification Agreement  
**STCW**  International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978  
**Tokyo MOU**  Memorandum of Understanding on Port State Control in the Asia-Pacific Region  
**TOVALOP**  Tanker Owners Voluntary Agreement Concerning Liability for Oil Pollution  
**UNEP**  United Nations Environment Programme  
**UNEP DTIE**  UNEP Division of Technology, Industry and Economics  
**WCMC**  UNEP World Conservation Monitoring Centre
Action against oil pollution on CD-ROM

This document contains links to additional resources supplied on the Action against oil pollution CD-ROM, and also to related information on the Internet.*

* Web browser and Internet connection required
Action against Oil Pollution

A guide to the intergovernmental and industry organizations involved in the prevention and mitigation of oil pollution in the marine environment.